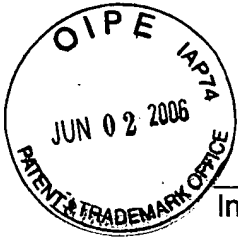


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Docket No.: 55340-RCE (70840)
(PATENT)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Takuma Hiramatsu

Application No.: 09/674,068

Confirmation No.: 9269

Filed: April 6, 2001

Art Unit: 2633

For: SPACE-DIVISION MULTIPLEX FULL
DUPLEX LOCAL AREA NETWORK

Examiner: Bello, Agustin

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 (Express Mail Label No: EV 654382159 US), and is addressed to Mail Stop: AMENDMENT, Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 on July 8, 2005.

By Kathryn A. Grindrod
Kathryn A. Grindrod

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references/documents listed on the attached PTO/SB/08a/b. It is respectfully requested that these references/documents be expressly considered during the prosecution of this application, and that these references/documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

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a. X Submitted herewith is a legible copy of (i) each U.S and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

b. This application relies under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. , filed on . The references listed on the attached Form PTO/SB08a/b were submitted to, and/or cited by, the Office in the prior application(s) and, therefore, are not required to be provided in this application.

II. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. X Except as may be indicated below in (b), all of the patents, publications or other information submitted herewith are in the English language or were cited in an English language Search Report, a copy of which is attached hereto (concise explanation not required).

b. A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:

c. The following additional information is provided for the Examiner's consideration:

III. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b)
(check one box)

- a. ☐ within three months of the filing date of a national application (37 C.F.R. § 1.97(b) (1). No fee or certification is required.
- b. ☐ within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b) (2). No fee or certification is required.
- c. ☐ before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b) (3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below, or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).

- a. ☐ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. §1.17(p).

OR

- b. ☒ See the certification below. No fee is required.

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V. STATEMENT UNDER 37 C.F.R. § 1.97(e)
(check only one box)

The undersigned hereby states that

- a. X each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- b. no item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.
- c. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned certifies that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

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____ Please charge Deposit Account No. 04-1105 in the amount of \$180.00 for the above-indicated fee. A triplicate copy of this paper is attached.

 X No fee is required.

 X Applicant believes that additional fees beyond those submitted herewith are not required in connection with the consideration of this submission. However, if for any reason a further fee is required, a fee paid is inadequate or a credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. 04-1105, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

If the Examiner has any questions concerning this Information Disclosure Statement, he/she is requested to contact the undersigned. Further, if it is determined that this Information Disclosure Statement has been filed under the wrong rule, the United States Patent and Trademark Office is requested to consider this Information Disclosure Statement under the proper rule, with a petition if necessary, and to charge the appropriate fee to Deposit Account No. **04-1105**.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 55340-RCE (70840). A duplicate copy of this paper is enclosed.

Dated: July 8, 2005

Respectfully submitted,

By David A. Tucker
David A. Tucker
Registration No.: 27,840
EDWARDS & ANGELL, LLP
P.O. Box 55874
Boston, Massachusetts 02205
(617) 517-5508
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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | 09/674,068-Conf. #9269 |
| | | | | Filing Date | April 6, 2001 |
| | | | | First Named Inventor | Takuma Hiramatsu |
| | | | | Art Unit | 2633 |
| | | | | Examiner Name | Bello, Agustin |
| Sheet | 1 | of | 1 | Attorney Docket Number | 55340-RCE (70840) |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--------------------------|---|-----------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | CA | K. Iversen, et al. "Application of Algorithms for DOA Estimation and Beamforming to Infrared Photodiode Arrays", Acoustics, Speech and Signal Processing, 1997, 1997 IEEE International Conference on Munich, Germany, 21-24 April 1997, Los Alamitos, CA USA, IEEE Comput. Soc, US, Vol. 5, 21 April 1997 pp. 4053-4056. | ✓ |
| | CB | A. P. Tang, et al., "Wireless Infrared Communication Links Using Multi-Beam Transmitters and Imaging Receivers", 1996 IEEE International Conference on Communications, Converging Technologies for Tomorrow's Applications, Dallas, 23-27 June 1996, IEEE International Conference on Communication, New York, IEEE, US, Vol. 1, 23 June 1996, pp. 180-186. | ✓ |
| | CC | D. P. Johnson, et al., "Free-Space Infrared Local Area Network (FIRLAN)", Optical Engineering, Soc. of Photo-Optical Instrumentation Engineers, Bellingham, US, Vol. 32, No. 9, 1 September 1993, pp. 2114-2117. | ✓ |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

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(70840)

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Date: July 8, 2005

Atty Docket No.: 55340-RCE (70840)

Inventor: Takuma Hiramatsu

Application No.: 09/674,068-Conf. #9269

Filing Date: April 6, 2001

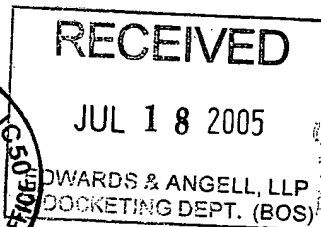
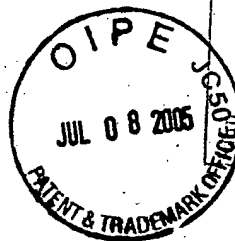
Title: SPACE-DIVISION MULTIPLEX FULL-DUPLEX LOCAL AREA NETWORK

Documents Filed:

Certificate of Express Mailing (1 page)

Information Disclosure Statement (10 pages)

IDS (Citation) by Applicant (3 References) (1 page)



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Due: August 2, 2005

SB